

came in the following order: Garden soil; yellow sandy clay; pipe clay; lime soils having crystalline grains; and lastly, a pulverulent chalk soil."

At noon of a July day when the temperature of the air was 90°, a thermometer placed a little more than 1 inch below the surface of different soils gave the following results:

	Degrees.
In quartz sand	126
In crystalline lime soil	115
In garden soil	114
In yellow sandy clay	100
In pipe clay	94
In chalk soil	87

It would seem that the warmest soils are those that retain the least water, and doubtless something of the slowness with which the fine soils increase in warmth is connected with the fact that they retain much water which in evaporating appropriates and renders latent a large quantity of heat.

METEOROLOGICAL CONGRESS AT PARIS, SEPTEMBER 10-16, 1900.

In addition to the important official international conferences that are occasionally called together by the Permanent International Committee, there are other unofficial congresses that may be assembled at any time. Such were held at Paris, France, in 1887, and at Chicago, Ill., in 1893. The Chief of the Weather Bureau has just received a circular letter notifying him that the authorities of the exposition at Paris have called an international meteorological congress to be held from the 10th to the 16th of September, 1900, and he has been requested to distribute certain circulars of invitation to those interested in the subject.

We print herewith the translation of the body of the circular, but omit the provisional program of subjects that may be discussed.

Those of our observers, either voluntary or regular, or other of our correspondents who desire to attend this conference, or who desire to simply become members and to receive the volume of proceedings that will eventually be published, should make application to M. Angot, General Secretary of the Committee of Organization, Avenue de l'Alma, No. 12. Money orders for the necessary 20 francs should be made payable to Th. Moureaux, Treasurer of the Congress. They should also in making their application be particular to write their names in full and very distinctly, with their titles and positions and home address, and the titles of communications, if any, that they propose to send in. The forms appropriate to such applications may be obtained from the Editor of the MONTHLY WEATHER REVIEW.

The following is the circular letter above referred to:

REPUBLIC OF FRANCE. MINISTRY OF COMMERCE, INDUSTRY, POSTS, AND TELEGRAPHS. EXPOSITION OF 1900. OFFICE OF THE GENERAL COMMITTEE OF ARRANGEMENTS. INTERNATIONAL CONGRESSES. INTERNATIONAL METEOROLOGICAL CONGRESS. PARIS, SEPTEMBER 10-16, 1900.

SIR: An international congress of meteorology will take place at Paris from September 10 to 16, 1900. We hope that you will be pleased to give it your membership and cooperation.

The International Meteorological Committee, which met recently at St. Petersburg, decided that it would call a meeting of the different committees established by the conference at Paris in 1896, at the same time with the present congress.

These committees are as follows:

Terrestrial magnetism and atmospheric electricity.—President, M. Rücker.

Aeronautics.—President, M. Hergesell.

Study of the clouds.—President, M. Hildebrandsson.

Radiation and insolation.—President, M. Violle.

The first of these committees held an important meeting at Bristol in 1898, an account of which, and the resolutions adopted by it, have been published in the Report of the British Association for the Advancement of Science.

Again, a large number of ascensions, with manned balloons and sounding balloons have been made in various countries for the systematic study of the upper regions of the atmosphere.

Finally, the publication and the discussion of the international observations of clouds made in 1896-97 will probably be accomplished during 1900 for the greater part of the countries that took part therein.

From these various points of view we are justified in counting on communications of the highest interest.

The questions that the congress will be called upon to discuss are not restricted, however, to meteorology so-called; they include, in general, everything that concerns the physics of the globe.

It seems to us that it would be premature, at the present moment, to prepare a detailed program of these different questions, and that it must suffice to have indicated its general character by the accompanying provisional program.

In order to facilitate the publication of the definitive program, we beg that you will kindly send, as soon as possible, and certainly before the 15th of May, 1900, your adhesion to this congress and indicate the questions that you intend to bring up for discussion.

The sessions of the congress and of the committees will be held at the hotel of the Société d'Encouragement, rue de Rennes, No. 44, the same place where the International Conference of 1896 held its meetings.

The price of the subscription is fixed at 20 francs (about \$4). The payment of this sum will confer the right to a card of admission and to the volume containing the proceedings of the sessions, as well as the memoirs presented to the congress. We hope that this publication will prove to be of great interest to all meteorologists.

Acceptance of membership and communications relative to the organization or to the program of the congress should be addressed to M. Angot, Secretary-General, Avenue de l'Alma, No. 12, Paris.

Subscriptions may be sent by post office order to M. Moureaux, Treasurer, rue de l'Université, No. 176, Paris.

(Signed)

E. MASCART,
President of the Committee on Organization.

A. ANGOT,
Secretary General.

METEOROLOGY AT THE PARIS EXPOSITION.

Early in March Prof. C. F. Marvin, Dr. O. L. Fassig, and Mr. E. G. Johnson, will be ready to sail for Paris in order to establish and take charge of the meteorological exhibit of the Weather Bureau at the Exposition of 1900. This exhibit will be in a special building occupied by the United States Weather Bureau and the United States Post Office Department, and will be located on the Quai d'Orsay on the Seine, north of the Eiffel Tower. The post office address will be care of the office of the United States Commissioner, 20 Avenue Rapp, Paris, France.

The representatives of the Bureau have promised to communicate to the Editor occasional notes on matters of meteorological interest, and voluntary observers who visit the Exposition are all invited to cooperate.

In addition to the work at the Exposition it is hoped that Professor Marvin will have an opportunity to make a series of international barometric comparisons, so that the standards used by the Weather Bureau may continue to be in close accord with those recognized by the Permanent International Committee. The important work already described in the MONTHLY WEATHER REVIEW as being done with sounding balloons, not only at Trappes, near Paris, but also at Berlin, Strasburg, St. Petersburg, and elsewhere, will undoubtedly also be specially studied by him if in any way possible consistently with his other duties.

It is interesting to note that apparatus devised for the use of the United States Weather Bureau is being imitated in Europe, and possibly Professor Marvin may find his own devices as made by others on exhibition at Paris.

LECTURES IN THE SCHOOLS.

Mr. E. C. Vose, Section Director, West Virginia, recently gave a talk on meteorology before the senior class of the high